

**In the Claims:**

Please AMEND the claims as follows:

1. (Amended) A method for regulating, controlling or modulating one or more antiports of aqueous humor ciliary epithelial cells to affect secretion, comprising the step of administering to the ciliary epithelial cells of the aqueous humor an effective secretion-modulating amount of a pharmaceutical composition [~~comprising~~] consisting essentially of a modulator of one or more antiports.

Claims 2-37: CANCELLED

38. (Previously Added) The method of claim 1, wherein the modulating effect is reversible upon cessation of administration of the modulator.

39. (Previously Added) The method of claim 1, wherein the modulator is administered to the cells *in vitro* or *in vivo*.

40. (Previously Added) The method of claim 1, wherein the modulator comprises a modulator of  $\text{Na}^+/\text{H}^+$  exchange or of  $\text{Cl}^-/\text{HCO}_3^-$  exchange.

41. (Previously Added) The method of claim 1, wherein the modulator is selected from the group consisting of beta blockers, amilorides and cariporide.

42. (Amended) The method of claim 1, wherein the modulator [~~comprises~~] is a beta blocker.

43. (Amended) The method of claim 42, wherein the beta blocker [~~comprises~~] is timilol.

44. (Previously Added) The method of claim 1, wherein the modulator comprises an amiloride or amiloride analog.

45. (Previously Added) The method of claim 44, wherein the amiloride comprises either amiloride or ethyl-isopropyl-amiloride.

46. (Previously Added) The method of claim 1, wherein the modulator comprises cariporide.

47. (Previously Added) The method of claim 1, wherein an anion is transferred into the ciliary epithelial cells of the aqueous humor to block native chloride channels.
48. (Previously Added) The method of claim 47, wherein the anion comprises cyclamate.
49. (Previously Added) The method of claim 1, wherein the one or more antiports are selected from the group consisting of a  $\text{Na}^+/\text{H}^+$  exchanger and a  $\text{Cl}^-/\text{HCO}_3^-$  exchanger.
50. (Previously Added) The method of claim 49, wherein the  $\text{Na}^+/\text{H}^+$  exchange occurs at the NHE-1 antiport.
51. (Previously Added) The method of claim 49, wherein the  $\text{Cl}^-/\text{HCO}_3^-$  exchange occurs at the AE2 antiport.
52. (Previously Added) The method of claim 1, wherein the one or more antiports comprise a  $\text{Na}^+/\text{H}^+$  exchanger and a  $\text{Cl}^-/\text{HCO}_3^-$  exchanger.
53. (Previously Added) The method of claim 52, wherein the  $\text{Na}^+/\text{H}^+$  exchange occurs at the NHE-1 antiport.
54. (Previously Added) The method of claim 52, wherein the  $\text{Cl}^-/\text{HCO}_3^-$  exchange occurs at the AE2 antiport.
55. (Previously Added) The method of claim 1, wherein secretion in the aqueous humor cells is elevated, and wherein the modulator is administered in an amount sufficient to reduce the elevated secretion.
56. (Amended) A method for regulating, controlling or modulating one or more antiports of aqueous humor ciliary epithelial cells to affect fluid pressure [~~in aqueous humor ciliary epithelial cells~~], comprising the step of administering to said cells an effective pressure modulating amount

of a pharmaceutical composition [~~comprising~~] consisting essentially of a modulator of one or more antiports.

57. (Previously Added) The method of claim 56, wherein the modulating effect is reversible upon cessation of administration of the modulator.

58. (Previously Added) The method of claim 56, wherein the modulator is administered to the cells *in vitro* or *in vivo*.

59. (Previously Added) The method of claim 56, wherein the modulator comprises a modulator of  $\text{Na}^+/\text{H}^+$  exchange or of  $\text{Cl}^-/\text{HCO}_3^-$  exchange.

60. (Previously Added) The method of claim 56, wherein the modulator is selected from the group consisting of beta blockers, amilorides and cariporide.

61. (Previously Added) The method of claim 56, wherein an anion is transferred into the ciliary epithelial cells of the aqueous humor to block native chloride channels.

62. (Previously Added) The method of claim 56, wherein the one or more antiports are selected from the group consisting of a  $\text{Na}^+/\text{H}^+$  exchanger and a  $\text{Cl}^-/\text{HCO}_3^-$  exchanger.

63. (Previously Added) The method of claim 62, wherein the  $\text{Na}^+/\text{H}^+$  exchange occurs at the NHE-1 antiport.

64. (Previously Added) The method of claim 62, wherein the  $\text{Cl}^-/\text{HCO}_3^-$  exchange occurs at the AE2 antiport.

65. (Previously Added) The method of claim 56, wherein the one or more antiports comprise a  $\text{Na}^+/\text{H}^+$  exchanger and a  $\text{Cl}^-/\text{HCO}_3^-$  exchanger.

66. (Previously Added) The method of claim 65, wherein the  $\text{Na}^+/\text{H}^+$  exchange occurs at the NHE-1 antiport.

67. (Previously Added) The method of claim 65, wherein the  $\text{Cl}^-/\text{HCO}_3^-$  exchange occurs at the AE2 antiport.

68. (Previously Added) The method of claims 56, wherein the fluid pressure is elevated, and wherein the modulator is administered in an amount sufficient to reduce the elevated pressure.

69. (Amended) A method for regulating, controlling or modulating one or more antiports of aqueous humor ciliary epithelial cells of an individual to affect fluid pressure [~~in aqueous humor ciliary epithelial cells~~] of [an] said individual, comprising the step of administering to the individual an effective intraocular pressure-modulating amount of a pharmaceutical composition [~~comprising~~] consisting essentially of a modulator of one or more antiports.

70. (Previously Added) The method of claim 69, wherein the modulating effect is reversible upon cessation of administration of the modulator.

71. (Previously Added) The method of claim 69, wherein the modulator is administered to the cells *in vitro* or *in vivo*.

72. (Previously Added) The method of claim 69, wherein the modulator comprises a modulator of  $\text{Na}^+/\text{H}^+$  exchange or of  $\text{Cl}^-/\text{HCO}_3^-$  exchange.

73. (Previously Added) The method of claim 69, wherein the modulator is selected from the group consisting of beta blockers, amilorides and cariporide.

74. (Previously Added) The method of claim 69, wherein an anion is transferred into the ciliary epithelial cells of the aqueous humor to block native chloride channels.

75. (Previously Added) The method of claim 69, wherein the one or more antiports are selected from the group consisting of a  $\text{Na}^+/\text{H}^+$  exchanger and a  $\text{Cl}^-/\text{HCO}_3^-$  exchanger.

76. (Previously Added) The method of claim 75, wherein the  $\text{Na}^+/\text{H}^+$  exchanger comprises NHE-1.

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77. (Previously Added) The method of claim 75, wherein the  $\text{Cl}^-/\text{HCO}_3^-$  exchanger comprises AE2.
78. (Previously Added) The method of claim 69, wherein the one or more antiports comprise a  $\text{Na}^+/\text{H}^+$  exchanger and a  $\text{Cl}^-/\text{HCO}_3^-$  exchanger.
79. (Previously Added) The method of claim 78, wherein the  $\text{Na}^+/\text{H}^+$  exchanger comprises NHE-1.
80. (Previously Added) The method of claim 78, wherein the  $\text{Cl}^-/\text{HCO}_3^-$  exchanger comprises AE2.
81. (Amended) A method for regulating, controlling or modulating one or more antiports of aqueous humor ciliary epithelial cells in an individual to affect intraocular pressure in [an] said individual, comprising the step of administering to the individual an effective intraocular pressure modulating amount of a pharmaceutical composition [~~comprising~~] consisting essentially of a modulator of one or more antiports.
82. (Previously Added) The method of claim 81, wherein the modulating effect is reversible upon cessation of administration of the modulator.
83. (Previously Added) The method of claim 81, wherein the modulator comprises a modulator of  $\text{Na}^+/\text{H}^+$  exchange or of  $\text{Cl}^-/\text{HCO}_3^-$  exchange.
84. (Previously Added) The method of claim 81, wherein the modulator is selected from the group consisting of beta blockers, amilorides and cariporide.
85. (Previously Added) The method of claim 81, wherein an anion is transferred into the ciliary epithelial cells of the aqueous humor to block native chloride channels.

86. (Previously Added) The method of claim 81, wherein the one or more antiports are selected from the group consisting of a  $\text{Na}^+/\text{H}^+$  exchanger and a  $\text{Cl}^-/\text{HCO}_3^-$  exchanger.
87. (Previously Added) The method of claim 86, wherein the  $\text{Na}^+/\text{H}^+$  exchanger comprises NHE-1.
88. (Previously Added) The method of claim 86, wherein the  $\text{Cl}^-/\text{HCO}_3^-$  exchanger comprises AE2.
89. (Previously Added) The method of claim 81, wherein the one or more antiports comprise a  $\text{Na}^+/\text{H}^+$  exchanger and a  $\text{Cl}^-/\text{HCO}_3^-$  exchanger.
90. (Previously Added) The method of claim 89, wherein the  $\text{Na}^+/\text{H}^+$  exchanger comprises NHE-1.
91. (Previously Added) The method of claim 89, wherein the  $\text{Cl}^-/\text{HCO}_3^-$  exchanger comprises AE2.
92. (Previously Added) The method of claim 81, wherein the intraocular pressure is elevated, and wherein the modulator is administered in an amount, sufficient to reduce the elevated intraocular pressure.
93. (Previously Added) The method of claim 81, wherein the individual suffers from or is subject to glaucoma.